# STATE OF CALIFORNIA FISH AND GAME COMMISSION INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION (Pre-publication of Notice Statement)

Amend Section 632
Title 14, California Code of Regulations
Re: Marine Protected Areas

I. Date of Initial Statement of Reasons: October 17, 2006

II. Dates and Locations of Scheduled Hearings

(a) Notice Hearing: Date: August 15, 2006

Location: Monterey, California

(b) Discussion Hearings: Date: December 8, 2006

Location: Santa Monica, California

Date: February 2007

Date and Location to be Determined

(c) Adoption Hearing: Date: March 2007

Date and Location to be Determined

#### III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

The proposed regulation is intended to meet the goals described in the Marine Life Protection Act (MLPA, Stats. 1999, ch. 1015). These goals address an overall concept of ecosystem-based management and the intent to improve upon California's existing array of marine protected areas (MPAs). The MLPA specifically requires that the Department of Fish and Game (Department) prepare a master plan and the Fish and Game Commission (Commission) adopt regulations based on the plan that achieve the MLPA goals. These goals are:

- To protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems.
- To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.

- To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity.
- To protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic value.
- To ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.
- To ensure that the State's MPAs are designed and managed, to the extent possible, as a network.
- (1) Ecosystem Based Resource Management Concept.

As indicated above, language in the MLPA supports the concept of ecosystem-based resource management. Additionally, the Marine Life Management Act (MLMA, Stats. 1998, ch. 1052) created a broad programmatic framework for managing fisheries through a variety of conservation measures, including MPAs. The MLMA specifically states that long term resource health shall not be sacrificed for short term benefits and that habitat should be maintained, restored, and enhanced [Fish and Game Code Section 7056 (a) and (b)].

The MLPA requires that the Commission adopt a Marine Life Protection Program that in part contains an improved marine reserve (now state marine reserve) component [Fish and Game Code Section 2853 (c)(1)] and protects the natural diversity of marine life and the structure, function, and integrity of marine ecosystems [Fish and Game Code Section 2853 (b)(1)]. This protection may help provide sustainable resources as well as enhance functioning ecosystems that provide benefits to both consumptive and non-consumptive user groups. A growing body of scientific literature reviewing benefits to marine species inside reserves (including increases in size and number of individuals, and in diversity of species) and to a lesser degree outside reserves (through spillover, larval transport, and protected spawning populations) also supports these concepts.

#### (2) The Network Concept

Important in developing the proposed regulation was the consideration that the central coast MPAs form a component of a statewide network. By definition in the MLPA, a network is applied to a biogeographical region. The Master Plan Framework for MPAs adopted by the Commission recognizes two biogeographical regions in California, with a boundary at Pt. Conception. The biological network concept calls for connectivity between MPAs through adult movements and larval transport of the species most likely to benefit from establishing MPAs. This includes marine plants, sedentary fishes and invertebrates, and species which are not highly mobile or migratory. This approach is consistent with the guidance provided in the MLPA [Fish and Game Code Section 2853 (b)(6)]. Networks may also be connected through consistency in the method of establishment, goals, objectives, and management and enforcement measures.

The proposed regulation establishes a network component of MPAs designed to include all representative central coast habitats and major oceanic conditions. Unique and critical habitats were considered separately to guarantee both representation and protection.

From an ecological perspective, the proposed regulation creates a network component of MPAs consistent with the goals of the MLPA. From an economic and social perspective, the proposed regulation attempts to minimize potential negative socio-economic impacts and optimize potential positive socio-economic impacts for all users, to the extent possible.

#### (3) Legislative Responses for Marine Ecosystem Management

The MLPA was enacted in response to a variety of human and environmental factors. California's population has increased from about 7 million people in the 1940's to 20 million in 1970 and more than 35 million today. Eighty percent of this population lives within 50 miles of the coast. Human population increases have led to not only higher demands on natural resources, but larger impacts through runoff, pollution, and habitat alteration.

At the same time, warm water oceanic conditions and disease have led to poor reproduction and recruitment of some marine species. This combination of increased use, poor environmental conditions, and disease has contributed to declines in some marine resources.

Popular finfish species like bocaccio, canary, widow, and cowcod rockfishes are federally listed as overfished, meaning their populations are below 25 percent of their unfished levels, and are now in recovery phase. Abalone, a once important commercial and recreational species group, are now the subject of a fishery moratorium in California south of San Francisco and one species, white abalone, has become the first marine invertebrate to be listed as endangered by the Federal government. Finally, the scientific data used to manage many of these resources, while the best available at the time, have since shown to be inadequate. It is now known, for example, that some rockfish species have life spans approaching 100 years and reproduce at much lower rates than other finfish.

All of these factors were present in the late 1990's and caused California's fisheries management agencies and the State Legislature to seek new solutions for protecting and sustaining resources. The MLMA addressed fisheries management in general and supported both an ecosystem perspective and the concept of MPAs. The MLPA established a programmatic framework for designating such MPAs in the form of a statewide network. The overriding goal of these acts is to ensure the conservation, sustainable use, and restoration of California's marine resources. Unlike previous laws, which focused on individual species, the acts focus on maintaining the health of marine ecosystems and biodiversity in order to sustain resources. In addition, AB 2800 (Stats. 2000, ch. 385) enacted the Marine Managed Areas Improvement Act (MMAIA), among other things, to standardize the designation of marine managed areas (MMAs), which include MPAs.

# (4) Changes in California Fisheries and Fisheries Management

Increases in California's human population have coincided with shifts in recreational and commercial fishing activity, growth in consumer demand for live fish, and innovations in fishing gear and technology. For example, between 1993 and 2001, landings and value of live finfish in California showed a twenty-fold increase, from less than 50,000 pounds with a value of \$100,000 in 1993 to more than 1 million pounds with a value of nearly \$4 million in 2001. Some of this increase in effort and catch has resulted in more restrictive regulations within the past 5 years, particularly with respect to nearshore and shelf finfish fisheries.

Some of the major problems facing rockfish stocks, including those declared overfished, have been addressed in recent years by

developing restricted access commercial fisheries and establishing extensive fishery closures through the use of the Cowcod Conservation Areas and the recreational and commercial California Rockfish Conservation Areas. The goals of these fishery management measures, however, are not a principal component of the MLPA, which focuses on the conservation of representative marine habitats, biodiversity, and ecosystems.

#### (5) Implementation of the Marine Life Protection Act

The Department attempted to implement the MLPA in two separate processes beginning in 2000 and 2002. In 2004 the Department entered into a partnership with a private organization and the Resources Agency; known as the MLPA Initiative, this began a process for implementing the MLPA on a regional basis. A Master Plan Framework, which provides guidance for establishing a statewide network of MPAs, was developed by the Department, the MLPA science advisory team (SAT), and MLPA Initiative staff, and was adopted by the Commission in August 2005. A blue ribbon task force (BRTF) was established by the Secretary for Resources to provide policy recommendations and oversight for the MLPA Initiative process. The BRTF selected the state waters within the central coast, from Pigeon Point (San Mateo County) to Point Conception (Santa Barbara County), as the first region in which to develop proposals for a component of a statewide network of MPAs. As required by the MLPA, the SAT was convened to provide scientific guidance in developing MPA proposals.

In June 2005 a large group of constituents representing multiple aspects of marine consumptive and nonconsumptive interests, and known as the MLPA Central Coast Regional Stakeholder Group (CCRSG), began meeting on a monthly basis to ultimately develop alternative packages of proposed MPAs for the central coast region.

Based on the six goals of the MLPA, the CCRSG developed a set of six regional goals for the central coast and a series of regional objectives and design and implementation considerations based on the regional goals (Attachment 1). For each proposed package of MPAs, objectives for each MPA were developed and linked to the regional goals and objectives. These goals and objectives were critical guidelines used by the CCRSG and others to propose MPAs for the central coast. They also serve as a significant improvement over the fragmented and non-cohesive approach to create MPAs prior to the 1990's.

By December 2005 the CCRSG had developed three alternative packages (referred to as packages 1, 2, and 3) and submitted these to the BRTF for consideration. Three additional packages were developed outside of the CCRSG process (referred to as packages A, B, and C) and considered by the BRTF. Two of these external packages were subsequently combined (packages A and C) and the third (Package B) was rejected by the BRTF and SAT as not complying with the MLPA requirements for a network.

The BRTF directed MLPA Initiative staff to develop a preferred alternative recommendation from the package options (referred to as Package S). At the March 14-15, 2006 meeting of the BRTF, Package S was combined with the CCRSG Package 3, further refined, and the modified package (referred to as Package 3R) became the BRTF's preferred alternative. The BRTF also made revisions to CCRSG Package 2 and forwarded the revised package (referred to as Package 2R) along with its preferred package and the remaining unchanged CCRSG package (Package 1) to the Department for consideration.

The Department analyzed the packages, public comment record, BRTF and SAT advice, and the feasibility of implementing each of the packages, and developed its own preferred alternative (referred to as Package P), based on the BRTF's preferred Package 3R. In June 2006 the Department formally presented four alternative packages (packages 1, 2R, 3R, and P) to the Commission at its meeting in Mammoth Lakes, California.

In August 2006 the Commission convened two special public hearings for the central coast MLPA process, one in Sacramento and one in Monterey, in order to receive public comment on the four packages, to develop a recommended preferred alternative, and to begin the formal regulatory and CEQA review process.

#### (6) Classifications of MPAs

The Marine Managed Areas Improvement Act created three new classifications of MPAs, three new classifications of MMAs, and deleted the previously-used classification names for use in the marine environment. By definition, MPAs and MMAs are also applicable designations in estuarine areas. The three MPA classifications are: state marine reserve (SMR), state marine park (SMP), and state marine conservation area (SMCA).

Within each type of MPA, basic regulations apply. These regulations are:

State Marine Reserves: In a state marine reserve, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, except under a permit or specific authorization from the Commission for research, restoration, or monitoring purposes.

State Marine Parks: In a state marine park, it is unlawful to injure, damage, take, or possess any living or nonliving marine resource for commercial exploitation purposes. Any human use that would compromise protection of the species of interest, natural community or habitat, or geological, cultural, or recreational features, may be restricted by the Commission as specified in subsection 632(b), Title 14, California Code of Regulations, areas and special regulations for use. The Commission may permit research, monitoring, and educational activities and certain recreational harvest in a manner consistent with protecting resource values.

State Marine Conservation Areas: In a state marine conservation area, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes except as specified in subsection 632(b), Title 14, California Code of Regulations, areas and special regulations for use. The Commission may permit research, education, and recreational activities, and certain commercial and recreational harvest of marine resources, provided that these uses do not compromise protection of the species of interest, natural community, habitat, or geological features.

One of the three MMA classifications, the state marine recreational management area (SMRMA), is applicable to this process. This MMA classification was created specifically to allow or restrict certain types of recreation:

State Marine Recreational Management Areas: In a state marine recreational management area, it is unlawful to perform any activity that, as determined by the designating entity or managing agency, would compromise the recreational values for which the area may be designated. Recreational opportunities may be protected, enhanced, or restricted, while preserving basic resource values of the area. No other use is restricted.

The MMAIA enacted Fish and Game Code Sections 1590 and 1591, and authorized the Commission to designate, delete, or modify state marine recreational management areas established by the Commission for hunting purposes, state marine reserves, and state marine conservation areas, as delineated in Public Resources Code Section 36725(a), and to incorporate by reference the provisions of the Marine Managed Areas Improvement Act. The Park and Recreation Commission has the authority to establish state marine parks, but may not regulate take of living marine resources within these areas without the concurrence of the Fish and Game Commission on any such proposed regulations.

#### (7) Commission preferred alternative - Proposed Regulation

The Commission developed its preferred alternative (the proposed regulation, referred to as Commission Preferred) using Package 3R as a basis with some revisions from the Department preferred Package P. The Commission also agreed to consider Packages 1 and 2R as alternatives for consideration in the formal regulatory process (designated below as alternatives 1 and 2 respectively). The Commission requested that the Department provide options for regulatory language in certain MPAs as described in Table 1 below. The Commission's preferred alternative and each of the other alternatives include a proposed state marine recreational management area in Morro Bay. As this designation of marine managed area was not previously included in Section 632, reference to it and a definition have been added in the proposed change.

The recommended set of MPAs, along with each alternative, includes state marine parks. Because the Fish and Game Commission does not have legislated authority to establish new state marine parks, the proposed regulation designates recommended parks as state marine conservation areas but maintains the recommended restrictions on take and prohibits commercial take in these areas. A later regulatory process, promulgated by the State Park and Recreation Commission, will change the designation of these areas to state marine parks.

In reviewing Section 632, Title 14, the Department found a few typographical errors and inconsistencies in terminology that are corrected in the proposed regulatory change. These changes are neither substantial, nor do they change the existing restrictions. They serve to clarify the existing regulations for greater ease of enforcement and public understanding. In the proposed change,

the term "offshore" has been consistently replaced with "seaward of mean lower low water"; where appropriate the phrase "straight lines connecting the following points in the order listed" has been added to the boundary descriptions; and scientific (Latin) names of species have been added (where appropriate) to lists of common names. An existing State Park Unit, the Point Lobos State Reserve, lies within the proposed Point Lobos State Marine Reserve. The proposed regulation clarifies that restrictions on access within the existing State Reserve will not extend into the area proposed in the expanded State Marine Reserve.

## (8) Alternatives

A range of alternatives is provided to meet the purposes of the proposed regulation. Each alternative, with the exception of the nochange alternative, collectively meets the goals and guidelines of the MLPA to varying degrees, and attempts to adhere to the SAT guidelines in the Master Plan Framework to the extent possible.

## (A) The Proposed regulation.

The proposed regulation includes a total of 29 MPAs for the central coast region (Table 1, Figure 1, and Attachment 2). Eight existing MPAs are included and have been expanded or, in the case of Pacific Grove SMCA and Carmel Bay SMCA, split into two new MPAs. Although the proposed regulation contains 19 new MPAs, five are directly adjacent to existing MPAs and can be considered expansions of the area. In these five cases, the additional expansion is with a state marine conservation area or state marine park with some allowed take. Thus, the proposed regulation includes 14 MPAs that are in areas previously not designated as MPAs.

Table 1. Proposed regulation for marine protected areas in the central coast, including proposed allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged geographically from north to south.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>	
Año Nuevo SMR	No-Take		
Greyhound Rock SMCA*	Recreational finfish by hook and line from shore only and recreational and commercial giant kelp ( <i>Macrocystis pyrifera</i> ) by hand, salmon, and squid	SMCA Low	
Natural Bridges SMR*	No-Take	SMR	
Elkhorn Slough SMR	No-Take	SMR	
Elkhorn Slough SMCA (SMP)* <sup>2</sup>	Recreational finfish by hook and line and clams in area adjacent to DFG wildlife area in west.	SMP low	
Moro Cojo Slough SMR*	No-Take	SMR	
Soquel Canyon SMCA*	Pelagic finfish <sup>3</sup>	SMCA high	
Portuguese Ledge SMCA*	Pelagic finfish <sup>3</sup>	SMCA high	
Edward F. Ricketts SMCA*	Recreational finfish by hook and line, and commercial take of kelp by hand north of 36° 38.83' North Latitude NOTE: Sub-Options are provide for the time of day and location where recreational fishing is allowed in this MPA	SMCA low	
Lovers Point SMR	No-Take	SMR	
Pacific Grove Marine Gardens SMCA	Recreational finfish and commercial kelp by hand	SMCA low	
Asilomar SMR	No-Take	SMR	
Carmel Pinnacles SMR	No-Take	SMR	
Carmel Bay SMCA	Recreational finfish and commercial kelp by hand	SMCA low	
Point Lobos SMR	No-Take	SMR	
Point Lobos SMCA*	Recreational and commercial salmon, albacore, and spot prawn	SMCA moderate	
Point Sur SMR*	No-Take	SMR	
Point Sur SMCA*	Recreational and commercial salmon and albacore	SMCA high	
Big Creek SMCA*  Recreational and commercial salmon, albacore, and spot prawn west of line approximating 25 ftms		SMCA moderate	
Big Creek SMR	No-Take	SMR	
Piedras Blancas SMR*	No-Take	SMR	
Piedras Blancas SMCA*	Recreational and commercial salmon and albacore	SMCA high	
Cambria SMCA (SMP)* <sup>2</sup>	All recreational take NOTE: Sub-Options are provided for the southern and northern boundaries of this MPA	SMP low	
Cambria SMR*  No-Take  NOTE: Sub-Options are provided for the northern boundary of this MPA		SMR	

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Morro Bay SMRMA*	No-Take in South. Recreational finfish and commercial bait fish receivering, and commercial aquaculture by permit in north. Waterfowl hunting under DFG regulations in entire area.	SMCA low/high
Morro Bay SMR*	No-Take	SMR
Point Buchon SMR*	No-Take	SMR
Point Buchon SMCA*	Recreational and commercial salmon and albacore	SMCA high
Vandenberg SMR	No-Take	SMR

<sup>\*</sup> New MPAs that are not direct expansion of an existing area.

<sup>&</sup>lt;sup>1</sup> In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan.
<sup>2</sup> These areas will initially be designated as state marine conservation areas, though their regulations

allow later change to state marine parks by the State Park and Recreation Commission.

Pelagic Finfish are defined as: northern anchovy (*Engraulis mordax*), barracudas (*Sphyraena spp.*), billfishes\* (family Istiophoridae), dolphinfish (*Coryphaena hippurus*), Pacific herring (*Clupea pallasi*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), salmon (*Oncorhynchus spp.*), Pacific sardine (*Sardinops sagax*), blue shark (*Prionace glauca*), salmon shark (*Lamna ditropis*), shortfin mako shark (*Isurus oxyrinchus*), thresher sharks (*Alopias spp.*), swordfish (*Xiphias gladius*), tunas (family Scombridae), and yellowtail (*Seriola lalandi*). \*Marlin is not allowed for commercial take.

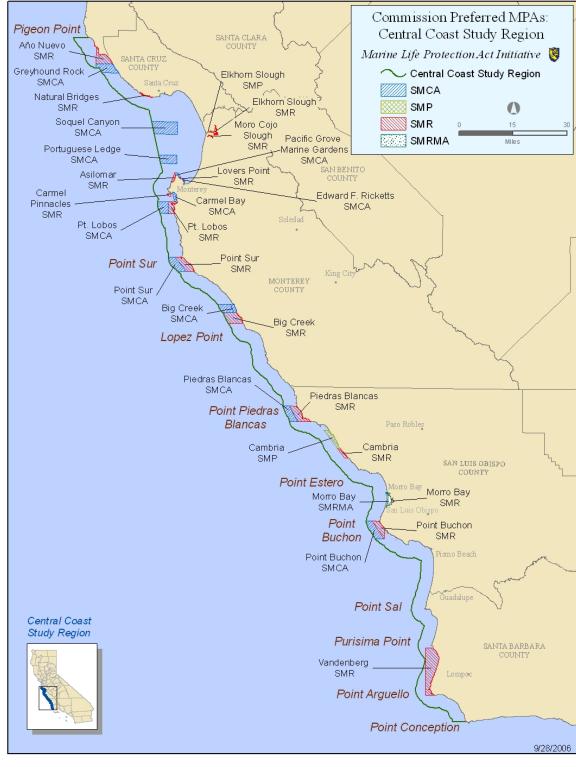


Figure 1. Marine protected areas in the proposed regulation.

SMCA = state marine conservation area SMP = state marine park
SMR = state marine reserve SMRMA = state marine recreational management area

The proposed regulation includes MPAs covering an area of approximately 204 square miles, representing approximately 17.7 percent of state waters within the central coast region (Attachment 3). Of this, less than half the area is within no-take state marine reserves covering approximately 97 square miles or approximately 8.4 percent of state waters within the central coast region (Figure 3). The remaining areas are primarily state marine conservation areas. Two of these SMCAs (Elkhorn Slough and Cambria) are recommended for later change to state marine parks and have restrictions on take which would allow this later designation. Many of the SMCAs allow the take of either all pelagic finfish (defined above) or salmon and albacore and were considered by the SAT to offer high ecosystem protection (Figure 4). In some state marine conservation areas take of other species such as squid, kelp, and spot prawn are also allowed. With a few exceptions, the state marine conservation areas protect benthic fishes and invertebrates most likely to benefit from area protection.

#### Percentage of Central Coast State Waters in MPA Packages (by type of MPA)

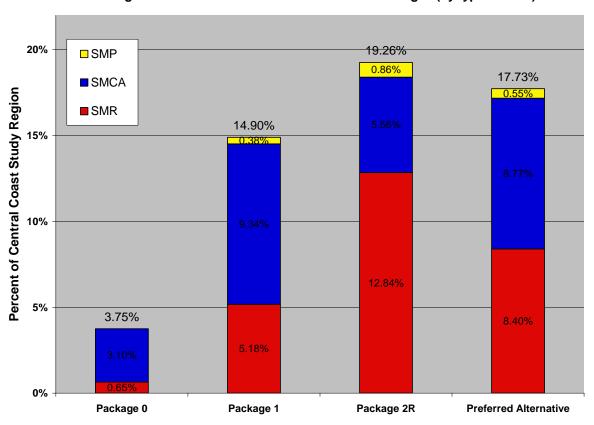


Figure 3. Percent of the central coast study region included in the proposed regulation as compared to existing MPAs (Package 0) and alternative proposals (Package 1 and 2R). SMP = state marine park, SMCA = state marine conservation area, and SMR = state marine reserve. Note that one state recreational management area (Morro Bay) is included in the calculations as part SMR and part SMCA based on its relative level of protection.

# Percentage of Central Coast in MPA Packages (by SAT protection level)

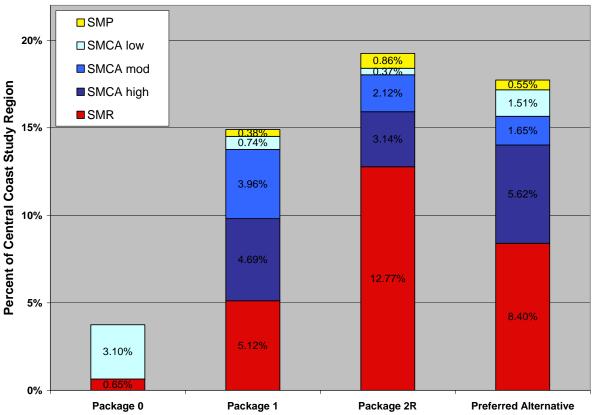


Figure 4. Percent of the central coast study region included in the proposed regulation as compared to existing MPAs (Package 0) and alternative proposals (Package 1 and 2R). SMP = state marine park, SMCA = state marine conservation area, and SMR = state marine reserve. Level of protection is noted as defined by the Science Advisory Team in the Master Plan. Note that one state recreational management area (Morro Bay) is included in the calculations as part SMR and part SMCA based on its relative level of protection.

# (B) Other Alternatives

Status Quo – This is the no-project alternative (Package 0) and consists of the existing 12 MPAs and one special closure covering an area of approximately 43 square miles, representing approximately 3.8 percent of state waters within the central coast region (Table 2 and attachments 3 and 4). Of this, only one fifth of the area is within no-take state marine reserves covering approximately 7.5 square miles or approximately 0.7 percent of state waters within the central coast region (Figure 3).

Table 2. Existing marine protected areas in the central coast, including allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged geographically from north to south.

MPA Name	Allowed Take	SAT level of protection <sup>1</sup>
Año Nuevo Special Closure	All except invertebrates between November 30 and April 30	SMCA Low
Elkhorn Slough SMR	No-Take	SMR
Hopkins SMR	No-Take	SMR
Pacific Grove SMCA	Recreational finfish, and invertebrates other than mollusks or crustaceans. Commercial sardines, mackerel, anchovies, squid, and herring by ring net, lampara net, or bait net.	SMCA low
Carmel Bay SMCA	Recreational finfish by hook-and-line or spear and commercial kelp under specific conditions.	SMCA low
Point Lobos SMR	No-Take	SMR
Julia Pfeiffer Burns SMCA	Recreational finfish, chiones, clams, cockles, rock scallops, native oysters, crabs, lobsters, ghost shrimp, sea urchins, mussels and marine worms (except no worms may be taken in any mussel bed unless taken incidentally to the take of mussels). Commercial finfish, crabs, ghost shrimp, jackknife clams, sea urchins, squid, kelp and worms (except no worms may be taken in any mussel bed, nor may any person pick up, remove, detach from the substrata any other organisms, or break up, move or destroy any rocks or other substrata or surfaces to which organisms are attached).	SMCA low
Big Creek SMR	No-Take	SMR
Atascadero Beach SMCA	All except clams	SMCA low
Morro Beach SMCA	All except clams and commercial take of giant kelp and bull kelp	SMCA low
Pismo SMCA	All finfish and the commercial take of algae other than giant and bull kelp	SMCA low
Pismo-Oceano Beach SMCA	All except clams and commercial take of giant kelp and bull kelp	SMCA low
Vandenberg SMR	No-Take	SMR

In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan.

Alternative 1 – This is the CCRSG Package 1, developed primarily by constituents representing recreational and commercial fishing interests along the central coast. It consists of 29 MPAs covering an area of approximately 171 square miles, representing approximately 14.9 percent of state waters within the central coast region (Table 3 and attachments 3, 4, and 5). Of this, over one third of the area is within no-take state marine reserves covering approximately 60 square miles or approximately 5.2 percent of state waters within the central coast region (Figure 3). The Department clarified certain proposed regulations for specific MPAs with

the Package 1 proponents and included these in the proposed regulations.

Table 3. Alternative 1 proposal for marine protected areas in the central coast, including proposed allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged

geographically from north to south.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>	
Año Nuevo SMR	No-Take		
Greyhound Rock SMCA	Recreational and commercial take of pelagic finfish <sup>2</sup> , squid, Dungeness crab, and salmon. Salmon may not be taken shallower than 25 fathoms.	SMCA Moderate	
Greyhound Rock SMR	No-Take	SMR	
Elkhorn Slough SMR	No-Take	SMR	
Moro Cojo Estuary SMR	No-Take	SMR	
Monterey Submarine Canyon No Bottom Contact SMCA	Pelagic finfish <sup>2</sup> and squid	SMCA high	
Ed Ricketts SMCA	Recreational finfish by hook and line, and commercial take of kelp by hand north of 36° 38.83' North Latitude.	SMCA low	
Hopkins SMR	No-Take	SMR	
Pacific Grove-Monterey SMCA	Recreational finfish, Dungeness crab, and squid. Commercial Dungeness crab, pelagic finfish <sup>2</sup> , squid, and kelp.	SMCA low	
Carmel Pinnacles SMR	No-Take	SMR	
Carmel Bay SMCA	Recreational finfish and commercial kelp and squid	SMCA low	
Point Lobos SMR	No-Take	SMR	
Point Lobos SMCA	Recreational and commercial salmon and commercial spot prawns	SMCA moderate	
Point Sur Deep Reef SMCA	Pelagic Finfish <sup>2</sup>	SMCA high	
Julia Pfeiffer Burns Offshore SMR	No-Take	SMR	
Julia Pfeiffer Burns SMR	No-Take	SMR	
Julia Pfeiffer Burns Offshore SMCA	Salmon and spot prawn	SMCA moderate	
Big Creek SMR	No-Take	SMR	
Alder Creek SMR	No-Take	SMR	
Alder Creek SMCA	Pelagic Finfish <sup>2</sup>	SMCA high	
Point Piedras Blancas SMR	No-Take	SMR	
Cambria SMCA (SMP) <sup>3</sup>	All recreational take	SMP low	
Morro Bay Harbor SMCA	Recreational take, commercial bait fish receivering, and commercial aquaculture by permit.	SMCA low	
Morro Bay South SMRMA			
Point Buchon SMR	No-Take	SMR	

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Point Buchon SMCA	Recreational and commercial salmon	SMCA high
Diablo Canyon Security Zone SMCA	No-Take	SMCA high
Vandenberg SMR	No-Take	SMR
Vandenberg Danger Zone 4 SMCA	Recreational and commercial salmon and crabs	SMCA moderate

<sup>&</sup>lt;sup>1</sup> In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan.

<sup>2</sup> Pelagic Finfish are defined as: northern anchovy (*Engraulis mordax*), barracudas (*Sphyraena spp.*), billfishes\* (family Istiophoridae), dolphinfish (*Coryphaena hippurus*), Pacific herring (*Clupea pallasi*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), salmon (*Oncorhynchus spp.*), Pacific sardine (*Sardinops sagax*), blue shark (*Prionace glauca*), salmon shark (*Lamna ditropis*), shortfin mako shark (*Isurus oxyrinchus*), thresher sharks (*Alopias spp.*), swordfish (*Xiphias gladius*), tunas (family Scombridae), and yellowtail (*Seriola lalandi*). \*Marlin is not allowed for commercial take.

<sup>3</sup> These areas will initially be designated as state marine conservation areas, though their regulations

Alternative 2 – This is the CCRSG Package 2R, developed primarily by constituents representing nonconsumptive interests along the central coast, and modified slightly by the BRTF. It consists of 30 MPAs covering an area of approximately 221 square miles, representing approximately 19.3 percent of state waters within the central coast region (Table 4 and attachments 3, 4, and 6). Of this, more than two thirds of the area is within no-take state marine reserves covering approximately 148 square miles or approximately 12.8 percent of state waters within the central coast region (Figure 3). The Department clarified certain proposed regulations for specific MPAs with the Package 2R proponents and included these in the proposed regulations.

Table 4. Alternative 2 proposal for marine protected areas in the central coast, including proposed allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged geographically from north to south.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Año Nuevo SMR	No-Take	SMR
Baldwin to Natural Bridges SMR	No-Take	SMR
Elkhorn Slough SMR	No-Take	SMR
Moro Cojo Estuary SMR	No-Take	SMR
Soquel Canyon SMCA	Salmon and albacore	SMCA high
Portuguese Ledge SMR	No-Take	SMR
Edward C. Cooper SMR	No-Take	SMR

<sup>&</sup>lt;sup>3</sup> These areas will initially be designated as state marine conservation areas, though their regulations allow later change to state marine parks by the State Park and Recreation Commission.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>	
Ed Ricketts SMCA	November 1 through the end of February, the commercial take of kelp north of 36° 36.83' N. lat. by hand only. Not more than 15 tons of kelp may be harvested from the portion of Administrative Kelp Bed 220 within the Ed Ricketts State Marine Conservation Area in the open time period.	SMCA moderate	
Hopkins SMR	No-Take	SMR	
Pacific Grove SMCA	Finfish may be taken recreationally in the area between the seaward extension of Esplanade Street and boundary of the Hopkins State Marine Reserve by hook and line or spear. Take is prohibited by use of poke-pole gear. Take is prohibited for any competition involving two or more persons in which persons are ranked, or winners are determined, based on size, weight, number of species, type of species, or number of fish taken by means of spearfishing. Commercial take prohibited except kelp harvesting allowed by hand harvest with restrictions to limit take approximately to existing levels.	SMCA low	
Asilomar SMR	No-Take	SMR	
Carmel Pinnacles SMR	No-Take	SMR	
Carmel Bay SMCA	Recreational finfish by hook and line or spear except poke-pole gear is prohibited. Take is prohibited for any competition involving two or more persons in which persons are ranked, or winners are determined, based on size, weight, number of species, type of species, or number of fish taken by means of spearfishing.  Commercial take of kelp by hand.	SMCA low	
Point Lobos SMR	No-Take	SMR	
Point Lobos SMCA	Recreational and commercial salmon, albacore, and spot prawn	SMCA moderate	
Point Sur SMR	No-Take	SMR	
Julia Pfeiffer Burns SMR	No-Take	SMR	
Big Creek SMCA	Recreational and commercial salmon, albacore, and spot prawn deeper than 50 fathoms	SMCA moderate	
Big Creek SMR	No-Take	SMR	
Piedras Blancas SMR	No-Take	SMR	
Cambria SMCA (SMP) <sup>2</sup>	All recreational take	SMP low	
Ken Norris SMR	No-Take	SMR	
Estero Bluff SMR	No-Take	SMR	
Morro Bay SMCA	Recreational take and commercial receivering of finfish for bait and permitted aquaculture of oysters.	SMCA low	
Morro Bay SMRMA			

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Morro Bay East SMR	No-Take	SMR
Point Buchon SMR	No-Take	SMR
Point Buchon SMCA	Recreational and commercial salmon and albacore	SMCA high
Purisima Point SMR	No-Take	SMR
Point Arguello SMR	No-Take	SMR

<sup>&</sup>lt;sup>1</sup> In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan.
<sup>2</sup> These areas will initially be designated as state marine conservation areas, though their regulations allow later change to state marine parks by the State Park and Recreation Commission.

(b) Authority and Reference Sections from Fish and Game Code and Public Resources Code for Regulation.

Authority: Sections 200, 202, 203.1, 205(c), 219, 220, 1590, 1591, 2860, 2861, 6570 and 10502.6, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

Reference: Sections 200, 202, 203.1, 205(c), 219, 220, 1580, 1583, 2861, 5521, 6653, 8420(e), and 8500, Fish and Game Code; and Sections 36700(e), 36710(e), 36725(a) and 36725(e), Public Resources Code.

(c) Specific Technology or Equipment Required by Regulatory Change.

None.

(d) Identification of Reports or Documents Supporting Regulation Change.

Master Plan Framework, August 2005

Attachment 1: Regional goals, objectives, and design and

implementation considerations for the central coast regional component of a statewide MPA network.

Attachment 2: Detailed description, objectives and maps of the

preferred alternative.

Attachment 3: Comparison of areas and habitats in each alternative

Attachment 4: Maps of alternatives

Attachment 5: Individual MPA objectives for alternative 1

Attachment 6: Individual MPA objectives for alternative 2

Attachment 7: Estimates of the Maximum Potential Economic

Impacts of Marine Protected Area Networks in the Central California Coast.

Attachment 8:

Marine Life Protection Act Initiative Estimated Long-Term Costs to Implement the California Marine Life Protection Act

# (e) Public Discussions of Proposed Regulations Prior to Notice of publication

Meeting Dates	Location	Major Topics
August 15, 2006	Monterey, CA	Fish and Game Commission special hearing with public comment on the alternative MPA packages for the central coast, and decision to begin the formal regulatory process and CEQA review with a Commission preferred alternative (developed at this meeting) two project alternatives, and a no-change alternative.
August 2, 2006	Sacramento, CA	Fish and Game Commission special hearing with public comment on the alternative MPA packages, including the Department's preferred alternative for the central coast.
June 22, 2006	Mammoth Lakes, CA	Fish and Game Commission meeting with formal transmittal of Department's preferred alternative MPA package and three other alternative MPA packages. No public comment was received.
May 25, 2006	Sacramento, CA	Fish and Game Commission- Blue Ribbon Task Force joint meeting with public comment on proposed MPA package alternatives
March 14-15, 2006	Seaside, CA	Blue Ribbon Task Force meeting with public comment on MPA package proposals
March 2, 2006	San Jose, CA	Science Advisory Team meeting with public comment on evaluation of MPA package proposals
January 31-February 1, 2006	Morro Bay, CA	Blue Ribbon Task Force meeting with public comment on MPA package proposals
January 20, 2006	San Jose, CA	Science Advisory Team meeting with public comment on evaluation of MPA package proposals
December 6-7, 2005	Monterey, CA	Central Coast Regional Stakeholder Group meeting with public comment on MPA package proposals
November 29-30, 2005	Monterey, CA	Blue Ribbon Task Force meeting with public comment on MPA package proposals
November 15, 2005	Santa Cruz, CA	Science Advisory Team meeting with public comment on evaluation of MPA package proposals
November 9-10, 2005	Cambria, CA	Central Coast Regional Stakeholder Group meeting with public comment on MPA package proposals
October 18, 2005	San Luis Obispo, CA	Science Advisory Team meeting with public comment on species likely to benefit from MPAs and tools for evaluating MPAs
October 5-6, 2005	Cambria, CA	Central Coast Regional Stakeholder Group meeting with public comment on existing MPAs

Meeting Dates	Location	Major Topics
September 28, 2005	San Luis Obispo, CA	Blue Ribbon Task Force meeting with public comment on MLPA regional goals and objectives
September 19, 2005	Santa Cruz, CA	Science Advisory Team meeting with public comment on scientific guidelines for Master Plan Framework and central coast regional goals and objectives
September 7-8, 2005	Cambria	Central Coast Regional Stakeholder Group meeting with public comment on MLPA regional goals and objectives
August 30, 2005	Santa Rosa, CA	Science Advisory Team meeting with public comment on scientific guidelines for Master Plan Framework and central coast regional goals and objectives
August 18, 2005	San Luis Obispo, CA	Commission adoption meeting for Master Plan framework with public comments
August 16, 2005	San Diego, CA	Commission public hearing with public comments on draft Master Plan Framework
August 10-11, 2005	Monterey, CA	Central Coast Regional Stakeholder Group meeting with public comment on MLPA regional goals and objectives and Regional Profile
August 9, 2005	Eureka, CA	Commission public hearing with public comments on draft Master Plan Framework
August 4, 2005	Windsor, CA	Commission public hearing with public comments on draft Master Plan Framework
August 2, 2005	Oakland, CA	Science Advisory Team meeting with public comment on scientific guidelines for Master Plan Framework
July 19, 2005	Oakland, CA	Commission public hearing with public comments on draft Master Plan Framework
July 12, 2005	Santa Barbara, CA	Commission public hearing with public comments on draft Master Plan Framework
July 11-12, 2005	Santa Barbara, CA	Blue Ribbon Task Force meeting with public comment on scientific approach to development of MPA package proposals
July 7-8, 2005	Morro Bay, CA	Central Coast Regional Stakeholder Group meeting with public comment on MLPA regional goals and objectives
July 6, 2005	San Luis Obispo, CA	Science Advisory Team meeting with public comment on scientific guidelines for Master Plan Framework
May 23, 2005	Sacramento, CA	Blue Ribbon Task Force meeting with public comment on the MLPA Initiative process along the central coast.
May 11, 2005	Oakland, CA	Science Advisory Team meeting with public comment on scientific guidelines for Master Plan Framework
April 11-12, 2005	Pasadena, CA	Blue Ribbon Task Force meeting with public comment on the designation of the central coast as the initial study region and on the proposed Master Plan Framework
March 23, 2005	Oakland, CA	Science Advisory Team meeting with public comment on information needs for Master Plan Framework
February 22-23, 2005	Monterey, CA	Blue Ribbon Task Force meeting with public comment on the designation of the central coast as the initial study region and on the proposed Master Plan Framework
February 17, 2005	Bodega Bay, CA	MLPA Initiative meeting with public comment on the location of the central coast study region

Meeting Dates	Location	Major Topics
February 16, 2005	Santa Cruz, CA	MLPA Initiative meeting with public comment on the location of the central coast study region
February 15, 2005	Morro Bay, CA	MLPA Initiative meeting with public comment on the location of the central coast study region
February 11, 2005	Oakland, CA	Science Advisory Team meeting with public comment on information needs for Master Plan Framework
January 10-11, 2005	Long Beach, CA	Blue Ribbon Task Force meeting with public comment on selection criteria for the initial study region and on the work plan for the Master Plan Framework
January 7, 2005	Oakland, CA	Science Advisory Team meeting with public comment on information needs for Master Plan Framework and selection criteria for the initial study region
October 23-24, 2004	Sacramento, CA	Blue Ribbon Task Force meeting with public comment on selection criteria for the initial study region

# IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change: See Section III(a)(8)(B) of this Initial Statement of Reasons for discussion of alternatives.

# (b) No Change Alternative:

The no change alternative would leave existing MPAs in state waters of the central coast unchanged. This would provide no additional protection to resources or ecosystem-based protection. The no-change alternative would not address the goals of the Marine Life Protection Act and potentially lead to continued declines in certain populations of marine life, habitats, and the marine environment.

# (c) Consideration of Alternatives:

In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purposes for which the regulation is proposed or would be as effective and less burdensome to the affected private persons than the proposed regulation.

# V. Mitigation Measures Required by Regulatory Action:

The proposed regulatory action would have no negative impact on the environment; therefore, no mitigation measures are needed. A full discussion of the proposed regulation and alternatives is included in the Department of Fish and Game's Draft Environmental Impact Report for Marine Protected Areas in the Central California Coast, November 2006.

# VI. Impact of Regulatory Action:

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

Each alternative may have negative short-term impacts on commercial and recreational fishing businesses. The impacts presented here do not represent a complete socioeconomic impact analysis, but rather what is generally referred to as a Step 1 analysis or "maximum potential loss." This analysis simply sums up the activity that currently takes place within a given alternative and translates these activities into corresponding economic values. Maximum potential loss does not take into account other management strategies/regulations and human behavioral changes, such as moving to other areas or changing fishing gear, that may mitigate, offset, or make matters better or worse. In addition, maximum potential loss does not consider possible future benefits.

The estimates of maximum potential impact shown here rely on the survey work and subsequent geographic information system (GIS) data analysis conducted by Ecotrust and reported in various documents to the BRTF. Ecotrust interviewed fishermen to determine both location of fishing activities and the relative importance of each location. Wilen and Abbott (2006, Attachment 7) combined Ecotrust's importance indices with cost share information from secondary sources to measure the maximum potential impacts of prospective closures on expected net economic values from commercial fishing. Wilen and Abbott's economic impact analysis included alternatives 1 and 2, along with other alternatives presented to the Commission. Once the Commission selected a preferred alternative, the methodology used to determine potential impacts for alternatives 1 and 2 were applied to the Proposed Regulation to develop an estimate. The estimates of the maximum potential annual losses for the three alternatives considered here (in real 2005 dollars) are approximately: \$670,000 (Alternative 1); \$1,260,000 (Alternative 2); and \$1,010,000 (Proposed Regulation) (Table 5). These are relative to average annual real 1999-2004 baseline gross revenues of approximately \$13,600,000 and net economic values of about \$8,800,000. They represent maximum potential percentage reductions in net pre-MPA economic values of: 7.5 percent (Alternative 1); 14.2 percent (Alternative 2); and 11.5 percent (Proposed Regulation) (Table 6).

It should be noted, however, that due to the methodology and need to maintain confidentiality of individual fishermen's financial data, the average impacts across fisheries may not be representative of the true maximum potential impact to an individual. In fisheries where there are few participants whose fishing grounds do not overlap (such as the spot prawn fishery) the numbers represented here may underestimate the maximum potential impact to individuals.

Table 5. Estimated annual maximum potential net economic value losses<sup>1</sup> relative to base scenario.

Fishery	Alternative 1	Alternative 2	Proposed Regulation
Anchovy	\$13,227	\$25,182	\$20,095
Cabezon	\$42,918	\$81,234	\$68,159
Dungeness crab	\$7,708	\$21,977	\$24,529
Deep Nearshore Rockfish	\$84,528	\$116,874	\$114,618
Halibut	\$13,492	\$20,992	\$20,112
Kelp Greenling	\$3,563	\$6,496	\$5,570
Lingcod	\$4,497	\$8,770	\$7,412
Mackerel	\$744	\$1,426	\$1,236
Rockfish Nearshore	\$73,302	\$131,432	\$115,028
Rockfish Shelf	\$7,109	\$12,074	\$7,881
Rockfish Slope	\$24,365	\$42,098	\$37,066
Rock Crab	\$9,966	\$11,055	\$11,321
Salmon	\$46,005	\$138,554	\$81,249
Sardine	\$39,830	\$84,297	\$63,698
Sablefish	\$40,032	\$136,567	\$139,908
White seabass	\$43,240	\$38,730	\$46,752
Surfperch	\$558	\$1,034	\$976
Spot Prawn	\$57,415	\$122,086	\$97,953
Squid	\$155,327	\$259,298	\$151,299
Total	\$667,826	\$1,260,176	\$1,014,862

<sup>1</sup>Losses are calculated in 2005 dollars.

Table 6. Estimated annual maximum potential net value losses in percentage terms

Fishery	Alternative 1	Alternative 2	Proposed Regulation
Anchovy	5.7%	10.9%	8.7%
Cabezon	14.6%	27.7%	23.3%
Dungeness crab	4.5%	12.8%	14.3%
Deep Nearshore Rockfish	16.5%	22.8%	22.4%
Halibut	6.4%	10.0%	9.6%
Kelp Greenling	13.1%	23.9%	20.5%
Lingcod	13.1%	25.6%	21.6%
Mackerel	5.4%	10.3%	8.9%
Rockfish Nearshore	14.3%	25.6%	22.4%
Rockfish Shelf	7.5%	12.7%	8.3%
Rockfish Slope	14.3%	24.8%	21.8%
Rock Crab	12.0%	13.3%	13.6%
Salmon	3.4%	10.3%	6.0%
Sardine	5.2%	11.1%	8.4%
Sablefish	6.8%	23.3%	23.9%
White seabass	9.1%	8.2%	9.9%
Surfperch	2.7%	5.1%	4.8%
Spot Prawn	7.3%	15.5%	12.4%
Squid	6.2%	10.3%	6.0%
Total	7.5%	14.2%	11.5%

Wilen and Abbott also computed rough estimates of secondary impacts on the fish processing industry and multiplier effects on the regional economy. These are proportional to the primary impacts described above (Table 7).

Table 7. Summary of estimated maximum potential economic impacts (annual real 2005 dollars) expanded by secondary and multiplier effects.

	Primary Impacts	Secondary Impacts	Induced Impacts	Total Impacts
Alternative 1	\$667,826	\$256,856	\$1,155,852	\$2,080,534
Alternative 2	\$1,260,175	\$484,683	\$2,181,072	\$3,925,929
Proposed Regulation	\$1,014,861	\$390,331	\$1,756,491	\$3,161,683

Ecotrust also analyzed the maximum potential loss to recreational fishing area in terms of percentage of the total fishing grounds and percentage of the number of fishing trips in a given year. Ecotrust only used recreational skiff fishing data for these analyses and did not include Commercial Passenger Fishing Vessel (CPFV or "party boat") spatial data. Similar to the commercial estimates of maximum potential loss, these estimates assume all fishing activity that previously occurred in a closed area is "lost" and not replaced by movement to another location. Estimates were

made for the two primary recreational fisheries in the central coast region, rockfish and salmon. None of the alternatives had greater than a 15 percent impact to total fishing grounds for rockfish or greater than a 5 percent impact to total fishing grounds for salmon and none had greater than a 30 percent impact to fishing trips for rockfish or greater than a 5 percent impact to fishing trips for salmon (Table 8). While not economic losses, if realized, the loss in recreational fishing activity could lead to decreases in revenues to recreational fishing dependent businesses.

Table 8. Maximum potential losses to private skiff recreational fishing grounds and fishing trips for rockfish and salmon.

	Alternative 1	Alternative 2	Proposed Regulation
Percent Recreational Salmon Grounds	0.01%	2.41%	1.13%
Percent of Salmon Fishing Trips	0.14%	2.55%	1.90%
Percent Recreational Rockfish Grounds	5.48%	13.53%	11.98%
Percent of Rockfish Fishing Trips	16.10%	28.25%	21.84%

In the long term, the potential negative impacts are expected to be balanced by the positive impacts of sustainable fisheries, non-consumptive benefits, and ecosystem function in the reserve areas. In addition, potential benefits may be realized through adult fish spillover to areas adjacent to marine reserves and state marine conservation areas which prohibit bottom fishing for finfish, as well as through transport to distant sites.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California:

Each alternative has potential impacts on the creation and elimination of jobs related to commercial and recreational fishing and non-consumptive activities. Estimates of the numbers of jobs eliminated as a direct result of the proposed action are difficult to determine. Commercial fishing operations are generally small businesses employing few individuals and, like all small businesses are subject to failure for a variety of causes. Additionally, the long-term intent of the proposed action is to increase sustainability in fish stocks and subsequently the long-term viability of these same small businesses. Jobs related to the non-consumptive tourism and recreational industries would be expected to increase over time by some unknown factor based on expected improvements in site quality and increased visitation to certain locations.

(c) Cost Impacts on a Representative Private Person or Business:

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

Any additional costs to State agencies for enforcement, monitoring, and management of MPAs are difficult to estimate and depend on not only the impacts of the proposed regulation but also other regulations and processes. Current cooperative efforts with the Monterey Bay National Marine Sanctuary provide funding for some existing costs and are expected to increase with the adoption of this regulation. Changes in enforcement, monitoring, and management will increase costs to the Department of Fish and Game as compared to current efforts.

Based upon an analysis of costs of similar programs, the estimated total costs for implementing the central coast MPAs ranges from \$1.8 to \$7.4 million, with an average of \$4.6 million (Attachment 8). These costs would increase as new study regions are designated and become operational. Funding was provided to the Department of Fish and Game in the 2006/2007 Governor's budget to cover the implementation costs of the central coast MPAs.

	(	e	) Nondiscretionar	v Costs/	/Savino	as to	Local A	Aaencies
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None

(f) Programs Mandated on Local Agencies or School Districts:

None

(g) Costs Imposed on Any Local Agency or School District that is Required to Be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4:

None

(h) Effect on Housing Costs:

None

# **Informative Digest / Policy Statement Overview**

The Marine Life Management Act (MLMA, Stats. 1998, ch. 1052) created a broad programmatic framework for managing fisheries through a variety of conservation measures, including Marine Protected Areas (MPAs). The Marine Life Protection Act (MLPA, Stats. 1999, ch. 1015) established a programmatic framework for designating such MPAs in the form of a statewide network. AB 2800 (Stats. 2000, ch. 385) enacted the Marine Managed Areas Improvement Act (MMAIA), among other things, to standardize the designation of Marine Managed Areas (MMAs), which include MPAs. The overriding goal of these acts is to ensure the conservation, sustainable use, and restoration of California's marine resources. Unlike previous laws, which focused on individual species, the acts focus on maintaining the health of marine ecosystems and biodiversity in order to sustain resources.

The proposed regulation is intended to meet the goals described in the MLPA. These goals address an overall concept of ecosystem-based management and the intent to improve upon California's existing array of marine protected areas (MPAs). The MLPA specifically requires that the Department of Fish and Game prepare a master plan and the Commission adopt regulations based on the plan that achieve the MLPA goals. These goals are:

- To protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems.
- To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.
- To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity.
- To protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic value.
- To ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.
- To ensure that the State's MPAs are designed and managed, to the extent possible, as a network.

Important in developing the proposed regulation was the consideration that the central coast MPAs form a component of a statewide network. By definition in the MLPA, a network is applied to a biogeographical region. The Master Plan Framework for MPAs adopted by the Commission recognizes two biogeographical regions in California, with a boundary at Pt. Conception. The biological network concept calls for connectivity

between MPAs through adult movements and larval transport of the species most likely to benefit from establishing MPAs. This includes marine plants, sedentary fishes and invertebrates, and species which are not highly mobile or migratory. This approach is consistent with the guidance provided in the MLPA [Fish and Game Code Section 2853 (b)(6)]. Networks may also be connected through consistency in the method of establishment, goals, objectives, and management and enforcement measures.

The proposed regulation establishes a network component of MPAs designed to include all representative central coast habitats and major oceanic conditions. Unique and critical habitats were considered separately to guarantee both representation and protection.

From an ecological perspective, the proposed regulation creates a network component of MPAs consistent with the goals of the MLPA. From an economic and social perspective, the proposed regulation attempts to minimize potential negative socioeconomic impacts and optimize potential positive socio-economic impacts for all users, to the extent possible.

Existing regulations (the no-project alternative) provide for 12 MPAs and one special closure covering an area of approximately 43 square miles, which represents approximately 3.8 percent of state waters within the central coast region. Of this, only one fifth of the area is within no-take state marine reserves covering approximately 7.5 square miles or approximately 0.7 percent of state waters within the central coast region.

The recommended set of MPAs, along with each alternative, includes state marine parks. Because the Fish and Game Commission does not have legislated authority to establish new state marine parks, the proposed regulation designates recommended parks as state marine conservation areas but maintains the recommended restrictions on take and prohibits commercial take in these areas. A later regulatory process, promulgated by the State Park and Recreation Commission, will change the designation of these areas to state marine parks.

In reviewing Section 632, Title 14, the Department found a few typographical errors and inconsistencies in terminology that are corrected in the proposed regulatory change. These changes are neither substantial, nor do they change the existing restrictions. They serve to clarify the existing regulations for greater ease of enforcement and public understanding. In the proposed change, the term "offshore" has been consistently replaced with "seaward of mean lower low water"; where appropriate the phrase "straight lines connecting the following points in the order listed" has been added to the boundary descriptions; and scientific (Latin) names of species have been added (where appropriate) to lists of common names. An existing State Park Unit, the Point Lobos State Reserve, lies within the proposed Point Lobos State Marine Reserve. The proposed regulation clarifies that restrictions on access within the existing State Reserve will not extend into the area proposed in the expanded State Marine Reserve.

<u>Proposed Regulation</u> - The proposed regulation includes a total of 29 MPAs for the central coast region (Table 1 and Figure 1). Eight existing MPAs are included and have been expanded or, in the case of Pacific Grove SMCA and Carmel Bay SMCA, split into two new MPAs. Although the proposed regulation contains 19 new MPAs, five are directly adjacent to existing areas and can be considered further expansion of the area. In these five cases, the additional expansion is a conservation area or a park with some allowed take. Thus, the proposed regulation includes 14 MPAs that are in areas previously not designated as MPAs.

Table 1. Proposed regulation for marine protected areas in the central coast, including proposed allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged geographically from north to south.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Año Nuevo SMR	No-Take	SMR
Greyhound Rock SMCA*	Recreational finfish by hook and line from shore only and recreational and commercial giant kelp ( <i>Macrocystis pyrifera</i> ) by hand, salmon, and squid	SMCA Low
Natural Bridges SMR*	No-Take	SMR
Elkhorn Slough SMR	No-Take	SMR
Elkhorn Slough SMCA (SMP)*2	Recreational finfish by hook and line and clams in area adjacent to DFG wildlife area in west.	SMP low
Moro Cojo Slough SMR*	No-Take	SMR
Soquel Canyon SMCA*	Pelagic finfish <sup>3</sup>	SMCA high
Portuguese Ledge SMCA*	Pelagic finfish <sup>3</sup>	SMCA high
Edward F. Ricketts SMCA*	Recreational finfish by hook and line, and commercial take of kelp by hand north of 36° 38.83' North Latitude NOTE: Sub-Options are provide for the time of day and location where recreational fishing is allowed in this MPA	SMCA low
Lovers Point SMR	No-Take	SMR
Pacific Grove Marine Gardens SMCA	Recreational finfish and commercial kelp by hand	SMCA low
Asilomar SMR	No-Take	SMR
Carmel Pinnacles SMR	No-Take	SMR
Carmel Bay SMCA	Recreational finfish and commercial kelp by hand	SMCA low
Point Lobos SMR	No-Take	SMR
Point Lobos SMCA*	Recreational and commercial salmon, albacore, and spot prawn	SMCA moderate
Point Sur SMR*	No-Take	SMR
Point Sur SMCA*	Recreational and commercial salmon and albacore	SMCA high
Big Creek SMCA*	Recreational and commercial salmon, albacore, and spot prawn west of line approximating 25 ftms	SMCA moderate
Big Creek SMR	No-Take	SMR
Piedras Blancas SMR*	No-Take	SMR

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Piedras Blancas SMCA*	Recreational and commercial salmon and albacore	SMCA high
Cambria SMCA (SMP)*2	All recreational take NOTE: Sub-Options are provided for the southern and northern boundaries of this MPA	SMP low
Cambria SMR*	No-Take NOTE: Sub-Options are provided for the northern boundary of this MPA	SMR
Morro Bay SMRMA*	No-Take in South. Recreational finfish and commercial bait fish receivering, and commercial aquaculture by permit in north. Waterfowl hunting under DFG regulations in entire area.	SMCA low/high
Morro Bay SMR*	No-Take	SMR
Point Buchon SMR*	No-Take	SMR
Point Buchon SMCA*	Recreational and commercial salmon and albacore	SMCA high
Vandenberg SMR	No-Take	SMR

<sup>\*</sup> New MPAs that are not direct expansion of an existing area.

<sup>2</sup> These areas will initially be designated as state marine conservation areas, though their regulations allow later change to state marine parks by the State Park and Recreation Commission.

<sup>&</sup>lt;sup>1</sup> In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan.
<sup>2</sup> These areas will initially be designated as state marine conservation areas, though their regulations

<sup>&</sup>lt;sup>3</sup> Pelagic Finfish are defined as: northern anchovy (*Engraulis mordax*), barracudas (*Sphyraena spp.*), billfishes\* (family Istiophoridae), dolphinfish (*Coryphaena hippurus*), Pacific herring (*Clupea pallasi*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), salmon (*Oncorhynchus spp.*), Pacific sardine (*Sardinops sagax*), blue shark (*Prionace glauca*), salmon shark (*Lamna ditropis*), shortfin mako shark (*Isurus oxyrinchus*), thresher sharks (*Alopias spp.*), swordfish (*Xiphias gladius*), tunas (family Scombridae), and yellowtail (*Seriola lalandi*). \*Marlin is not allowed for commercial take.

Commission Preferred MPAs: Pigeon Point Central Coast Study Region SANTA CLARA COUNTY Año Nuevo Marine Life Protection Act Initiative 🖁 SMR Greyhound Rock Central Coast Study Region Elkhorn Slough SMCA SMP SMCA Natural Bridges Elkhorn Slough SMP 0 SMR SMR Soquel Canyon Moro Cojo SMR 15 SMCA Slough Pacific Grove SMRMA Miles SMR Portuguese Ledge Marine Gardens SMCA SMCA Lovers Point SAN BENITO Asilomar SMR SMR Carmel Edward F. Ricketts Carmel Bay Pinnacles SMCA SMCA SMR Pt. Lobos Pt. Lobos SMCA SMR Point Sur Point Sur SMR Point Sur COUNTY SMCA Big Creek SMCA Big Creek Lopez Point Piedras Blancas SMCA Piedras Blancas SMR Point Piedras Blancas Paso Robles Cambria Cambria SMP SMR SAN LUIS OBISPO COUNTY Point Estero Morro Bay Morro Bay SMR SMRMA Point Point Buchon SMR Buchon Point Buchon SMCA Point Sal Central Coast Study Region Purisima Point SANTA BARBARA COUNTY Vandenberg SMR Lompo Point Arguello Point Conception 9/28/2006

Figure 1. Marine protected areas in the proposed regulation.

SMCA = state marine conservation area SMP = state marine park
SMR = state marine reserve SMRMA = state marine recreational management area

The proposed regulation includes MPAs covering an area of approximately 204 square miles, representing approximately 17.7 percent of state waters within the central coast region. Of this, less than half the area is within no-take state marine reserves covering approximately 97 square miles or approximately 8.4 percent of state waters within the central coast region (Figure 3). The remaining areas are primarily state marine conservation areas. Two of these SMCAs (Elkhorn Slough and Cambria) are recommended for later change to state marine parks and have restrictions on take which would allow this later designation. Many of the SMCAs allow the take of either all pelagic finfish (defined above) or salmon and albacore and were considered by the SAT to offer high ecosystem protection (Figure 4). In some state marine conservation areas take of other species such as squid, kelp, and spot prawn are also allowed. With a few exceptions, the state marine conservation areas protect benthic fishes and invertebrates most likely to benefit from area protection.

## Percentage of Central Coast State Waters in MPA Packages (by type of MPA)

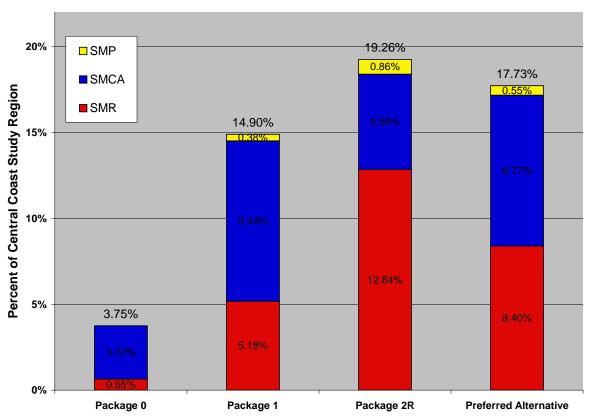


Figure 3. Percent of the central coast study region included in the proposed regulation as compared to existing MPAs (Package 0) and alternative proposals (Package 1 and 2R). SMP = state marine park, SMCA = state marine conservation area, and SMR = state marine reserve. Note that one state recreational management area (Morro Bay) is included in the calculations as part SMR and part SMCA based on its relative level of protection.

#### Percentage of Central Coast in MPA Packages (by SAT protection level)

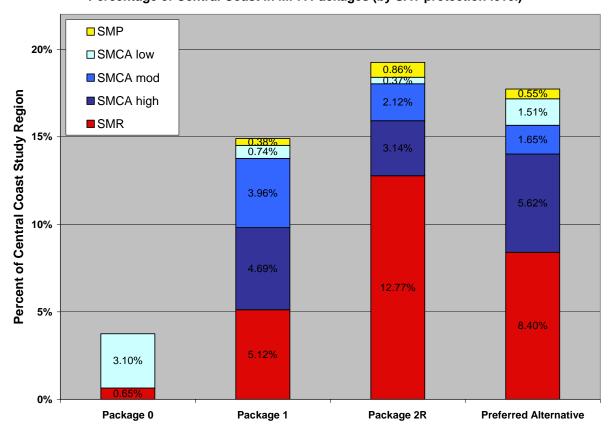


Figure 4. Percent of the central coast study region included in the proposed regulation as compared to existing MPAs (Package 0) and alternative proposals (Package 1 and 2R). SMP = state marine park, SMCA = state marine conservation area, and SMR = state marine reserve. Level of protection is noted as defined by the Science Advisory Team in the Master Plan. Note that one state recreational management area (Morro Bay) is included in the calculations as part SMR and part SMCA based on its relative level of protection.

Alternative 1 – This is the Central Coast Regional Stakeholders Group (CCRSG) Package 1, developed primarily by constituents representing recreational and commercial fishing interests along the central coast. It consists of 29 MPAs covering an area of approximately 171 square miles, which represents approximately 14.9 percent of state waters within the central coast region (Table 2). Of this, over one third of the area is within no-take state marine reserves covering approximately 60 square miles or approximately 5.2 percent of state waters within the central coast region (Figure 3). The Department clarified certain proposed regulations for specific MPAs with the Package 1 proponents and included these in the proposed regulations.

Table 2. Alternative 1 proposal for marine protected areas in the central coast, including proposed allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged geographically from north to south.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Año Nuevo SMR	No-Take	SMR
Greyhound Rock SMCA  Recreational and commercial take of pelagic finfish <sup>2</sup> , squid, Dungeness crab, and salmon. Salmon may not be taken shallower than 25 fathoms.		SMCA Moderate
Greyhound Rock SMR	No-Take	SMR
Elkhorn Slough SMR	No-Take	SMR
Moro Cojo Estuary SMR	No-Take	SMR
Monterey Submarine Canyon No Bottom Contact SMCA	Pelagic finfish <sup>2</sup> and squid	SMCA high
Ed Ricketts SMCA	Recreational finfish by hook and line, and commercial take of kelp by hand north of 36° 38.83' North Latitude.	SMCA low
Hopkins SMR	No-Take	SMR
Pacific Grove-Monterey SMCA	Recreational finfish, Dungeness crab, and squid. Commercial Dungeness crab, salmon, pelagic finfish <sup>2</sup> , squid, and kelp.	SMCA low
Carmel Pinnacles SMR	No-Take	SMR
Carmel Bay SMCA	Recreational finfish and commercial kelp and squid	SMCA low
Point Lobos SMR	No-Take	SMR
Point Lobos SMCA	Recreational and commercial salmon and commercial spot prawns	SMCA moderate
Point Sur Deep Reef SMCA	Pelagic Finfish <sup>2</sup>	SMCA high
Julia Pfeiffer Burns Offshore SMR	No-Take	SMR
Julia Pfeiffer Burns SMR	No-Take	SMR
Julia Pfeiffer Burns Offshore SMCA	Salmon and spot prawn	SMCA moderate
Big Creek SMR	No-Take	SMR
Alder Creek SMR	No-Take	SMR
Alder Creek SMCA	Pelagic Finfish <sup>2</sup>	SMCA high
Point Piedras Blancas SMR	No-Take	SMR
Cambria SMCA (SMP) <sup>3</sup>	All recreational take	SMP low
Morro Bay Harbor SMCA	Recreational take, commercial bait fish receivering, and commercial aquaculture by permit.	SMCA low
Morro Bay South SMRMA	No-Take except recreational hunting of waterfowl unless otherwise prohibited	SMR
Point Buchon SMR	No-Take	SMR
Point Buchon SMCA	Recreational and commercial salmon	SMCA high
Diablo Canyon Security Zone SMCA	No-Take	SMCA high
Vandenberg SMR	No-Take	SMR

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Vandenberg Danger Zone 4 SMCA	Recreational and commercial salmon and crabs	SMCA moderate

In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan. Pelagic Finfish are defined as: northern anchovy (Engraulis mordax), barracudas (Sphyraena spp.), billfishes\* (family Istiophoridae), dolphinfish (Coryphaena hippurus), Pacific herring (Clupea pallasi), jack mackerel (Trachurus symmetricus), Pacific mackerel (Scomber japonicus), salmon (Oncorhynchus spp.), Pacific sardine (Sardinops sagax), blue shark (Prionace glauca), salmon shark (Lamna ditropis), shortfin mako shark (Isurus oxyrinchus), thresher sharks (Alopias spp.), swordfish (Xiphias gladius), tunas (family Scombridae), and yellowtail (*Seriola lalandi*). \*Marlin is not allowed for commercial take.

These areas will initially be designated as state marine conservation areas, though their regulations

Alternative 2 – This is the CCRSG Package 2R, developed primarily by constituents representing nonconsumptive interests along the central coast, and modified slightly by the Blue Ribbon Task Force. It consists of 30 MPAs covering an area of approximately 221 square miles, which represents approximately 19.3 percent of state waters within the central coast region (Table 3). Of this, more than two thirds of the area is within notake state marine reserves covering approximately 148 square miles or approximately 12.8 percent of state waters within the central coast region (Figure 3). The Department clarified certain proposed regulations for specific MPAs with the Package 2R proponents and included these in the proposed regulations.

Table 3. Alternative 2 proposal for marine protected areas in the central coast, including proposed allowed take and Science Advisory Team (SAT) assigned level of protection. Areas arranged geographically from north to south.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
Año Nuevo SMR	No-Take	SMR
Baldwin to Natural Bridges SMR	No-Take	SMR
Elkhorn Slough SMR	No-Take	SMR
Moro Cojo Estuary SMR	No-Take	SMR
Soquel Canyon SMCA	Salmon and albacore	SMCA high
Portuguese Ledge SMR	No-Take	SMR
Edward C. Cooper SMR	No-Take	SMR
Ed Ricketts SMCA	November 1 through the end of February, the commercial take of kelp north of 36° 36.83' N. lat. by hand only. Not more than 15 tons of kelp may be harvested from the portion of Administrative Kelp Bed 220 within the Ed Ricketts State Marine Conservation Area in the open time period.	SMCA moderate
Hopkins SMR	No-Take	SMR
Pacific Grove SMCA	Finfish may be taken recreationally in the area between the seaward extension of Esplanade Street and boundary of the Hopkins State Marine Reserve by hook and line or spear. Take is prohibited by use of poke-pole gear. Take is prohibited for any competition involving two or	SMCA low

allow later change to state marine parks by the State Park and Recreation Commission.

MPA Name	Proposed Allowed Take	SAT level of protection <sup>1</sup>
	more persons in which persons are ranked, or winners are determined, based on size, weight, number of species, type of species, or number of fish taken by means of spearfishing.  Commercial take prohibited except kelp harvesting allowed by hand harvest with restrictions to limit take approximately to existing levels.	•
Asilomar SMR	No-Take	SMR
Carmel Pinnacles SMR	No-Take	SMR
Carmel Bay SMCA	Recreational finfish by hook and line or spear except poke-pole gear is prohibited. Take is prohibited for any competition involving two or more persons in which persons are ranked, or winners are determined, based on size, weight, number of species, type of species, or number of fish taken by means of spearfishing. Commercial take of kelp by hand.	SMCA low
Point Lobos SMR	No-Take	SMR
Point Lobos SMCA	Recreational and commercial salmon, albacore, and spot prawn	SMCA moderate
Point Sur SMR	No-Take	SMR
Julia Pfeiffer Burns SMR	No-Take	SMR
Big Creek SMCA	Recreational and commercial salmon, albacore, and spot prawn deeper than 50 fathoms	SMCA moderate
Big Creek SMR	No-Take	SMR
Piedras Blancas SMR	No-Take	SMR
Cambria SMCA (SMP) <sup>2</sup>	All recreational take	SMP low
Ken Norris SMR	No-Take	SMR
Estero Bluff SMR	No-Take	SMR
Morro Bay SMCA	Recreational take and commercial receivering of finfish for bait and permitted aquaculture of oysters.	SMCA low
Morro Bay SMRMA	No-Take. Waterfowl hunting under DFG regulations is allowed.	SMCA high
Morro Bay East SMR	No-Take	SMR
Point Buchon SMR	No-Take	SMR
Point Buchon SMCA	Recreational and commercial salmon and albacore	SMCA high
Purisima Point SMR	No-Take	SMR
Point Arguello SMR	No-Take	SMR

<sup>&</sup>lt;sup>1</sup>In order to analyze the differences between no-take reserves and limited take conservation areas and parks, the Science Advisory Team developed a protection level ranking described in the Master Plan.
<sup>2</sup> These areas will initially be designated as state marine conservation areas, though their regulations allow later change to state marine parks by the State Park and Recreation Commission.